

### REMARKS/ARGUMENTS

This Amendment is in response to the Office Action dated April 10, 2006. Claims 1-16 are pending in the present application. Claims 1-4 and 15 are allowed. Claims 5-14 and 16 have been rejected. Claims 1-16 have been amended to address objections and §112 rejections, as well as to correct typographical and grammatical errors, in view of the Examiner's comments, in order to place the claims in condition for allowance. Applicants respectfully submit that no new matter has been presented. Claims 1-16 remain pending. For the reasons set forth more fully below, Applicants respectfully submit that the claims as presented are allowable. Consequently, reconsideration, allowance, and passage to issue are respectfully requested.

#### Allowed Claims

The Examiner has stated:

Claims 1 to 4 and 15 are allowed.

Claims 5 to 14 and 16 would be allowable once the 112 second paragraph rejection is overcome. ... order to limit the spread of errors by using a generator polynomial with elements of a Galois field. The prior art made of record also teaches that the generator polynomial is irreducible; however, the prior art made of record taken alone or in combination fails to teach or fairly suggest or render obvious the novel element of the instant invention.

Specifically, the prior art made of record fails to teach or fairly suggest a method for encoding and decoding a received bit chain by building a matrix using elements of the Galois field of a multiplicative group and a circular permutation as detailed in independent claims 1 and 5.

Applicants note with appreciation that claims 1-4 and 15 are allowed and that claims 5-14 and 16 would be allowable once the §112, second paragraph, rejection is overcome. In response, claims 5-14 and 16 have been amended to overcome the §112, second paragraph, rejection, as described below.

### Specification/Abstract

The Examiner has stated:

**Applicant is reminded of the proper language and format for an abstract of the disclosure.**

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In response, the abstract has been amended in accordance with the Examiner's suggestions to address the above-referenced objections. Specifically, the abstract has been shortened to be less than 150 words.

### Claim Objections

The Examiner has stated:

**Claims 1 to 16 are objected to because of the following informalities:**

i) the numerals referring to elements in the drawings are not required for the claims; please remove all numerals.

ii) an element in the claim is introduced with the article "a" and then refer to with "the" or "said" there are elements in the claim being introduced with "the" instead of "a"; for instance, claim 1 line 7, recites "the Galois field" line 9 recites "the multiplicative group" etc.

**Appropriate correction is required.**

In response, claims 1, 3-10, and 13-14 have been amended in accordance with the Examiner's instructions/suggestions to address the above-referenced objections. Specifically, the reference numerals have been deleted from claims 1, 3-10, and 13-14. Furthermore, claims 1-16 have been amended to provide proper antecedent basis for the claims.

### Claim Rejections - 35 U.S.C. §112

The Examiner has stated:

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 to 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 line 3 to 4, defines the received bit chain have “m bit chain” and “a code bit chain” and line 28 refers to “p bit sub chains” the examiner is unsure if the sub chain is new or is referring back to one that was defined. Claims 6 to 14 and 16 are also rejected due to their dependency on a rejected base claim.

The “sub chain” refers back to one that was defined. Specifically, “p bit sub chain” is a sub chain “in the m MSB bits of the received bit chain.” Applicants respectfully submit that claim 5 complies with 35 U.S.C. §112, second paragraph.

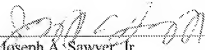
### Conclusion

In view of the foregoing, Applicants submit that claims 1-16 are patentable. Applicants, therefore, respectfully request reconsideration and allowance of the claims as now presented.

Applicants' attorney believes that this application is in condition for allowance. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted,  
SAWYER LAW GROUP LLP

July 7, 2006  
Date

  
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